

# CP&L

Carolina Power & Light Company

P. O. Box 101, New Hill, N. C. 27562  
October 7, 1982

Mr. James P. O'Reilly  
United States Nuclear Regulatory Commission  
Region II  
101 Marietta Street, Northwest (Suite 3100)  
Atlanta, Georgia 30303

NRC-11

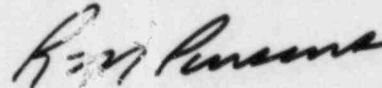
CAROLINA POWER & LIGHT COMPANY  
SHEARON HARRIS NUCLEAR POWER PLANT  
1985-89 - 900,000 KW - UNITS 1 & 2  
DEFECTIVE GOVERNOR DRIVE COUPLINGS  
PURCHASE ORDER NY-435079 - ITEM 101

Dear Mr. O'Reilly:

Attached is an interim report on the subject which was deemed reportable per the provisions of 10CFR50.55(e) and 10CFR, Part 21, on September 9, 1982. CP&L is pursuing this matter, and it is currently projected that corrective action and submission of the final report will be accomplished by January, 1983.

Thank you for your consideration in this matter.

Yours very truly,



R. M. Parsons  
Project General Manager  
Shearon Harris Nuclear Power Plant

RMP/sh

Attachment

cc: Mr. G. Maxwell (NRC-SHNPP)  
Mr. V. Stello (NRC)

82 OCT 12 A10:09  
USNRC REGION II  
ATLANTA, GEORGIA

8210220484 821007  
PDR ADOCK 05000400  
S PDR

**OFFICIAL COPY**

IE 27

CAROLINA POWER & LIGHT COMPANY  
SHEARON HARRIS NUCLEAR POWER PLANT

UNIT NO. 1

Interim Report  
October 4, 1982

Reportable Under 10CFR50.55(e)  
and 10CFR21

SUBJECT: Shearon Harris Nuclear Power Plant - Unit No. 1  
10CFR50.55(e) and 10CFR21 Reportable Deficiency.  
Defective governor drive coupling installed in the  
emergency diesel engine-generator sets under Purchase  
Order NY-435079 from Transamerica DeLaval, Inc.

ITEM: Isoprene governor drive coupling located in the engine's  
gear case. Part No. AK-007-000

SUPPLIED BY: Transamerica DeLaval, Inc., Oakland, California  
The governor drive coupling is manufactured by Koppers Co., Inc.

NATURE OF DEFICIENCY: Transamerica DeLaval, Inc. shipped two diesel engines to  
the Shearon Harris site on Purchase Order NY-435079 in  
May and June, 1981.

In June 1982, Transamerica DeLaval notified CP&L that the  
engines contain an isoprene governor drive coupling and  
there is a potential problem since the material, isoprene,  
is designed for atmospheric use and it is not suitable  
for use in the high temperature, oil atmosphere encountered  
in the engine's gear case.

DATE PROBLEM OCCURRED: Refer to section above.

DATE PROBLEM REPORTED: September 9, 1982 - CP&L (N. J. Chiangi) notified the NRC  
Region II (A. Hardin) that this item was reportable under  
10CFR50.55(e) and 10CFR21.

SCOPE OF PROBLEM: The problem involves the two diesel engines shipped on  
Purchase Order NY-435079. These engines have isoprene  
governor drive couplings installed.

SAFETY IMPLICATION: The diesel-generator sets supply power to the ESF buses  
in case of a loss of both normal on-site and off-site  
power sources.

In the high temperature, oil atmosphere encountered in  
the engine's gear case, the rubber deteriorates rapidly  
and ultimately fails. While the coupling is "fail safe"  
and will mechanically lock up when the element fails,  
sufficient frequency instability could be induced that  
would result in the engine's tripping off line, thereby  
affecting engine availability.

REASON  
DEFICIENCY  
IS  
REPORTABLE:

If left uncorrected, failure of the governor drive coupling could result in the loss of the emergency on-site AC power supply.

CORRECTIVE  
ACTION:

The diesel engines are currently on "hold" at the Shearon Harris site. The isoprene governor drive coupling will be replaced according to the instructions attached to the Transamerica DeLaval to CP&L letter dated August 18, 1982.

FINAL REPORT:

A final report will be issued once the corrective action described above has been completed. It is currently projected that the submittal date will be January 1983.